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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/961,282 | 09/25/2001 | Mitsuo Yasushi | Q66381 | 5328 |

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EXAMINER

WANG, LIANG CHE A

ART UNIT PAPER NUMBER

2155

DATE MAILED: 03/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|---------------------------------|--------------------------------|--|
| Office Action Summary | Application No. 09/961,282 | Applicant(s) YASUSHI ET AL. | |
| | Examiner Liang-che Alex Wang | Art Unit 2155 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>4/2/06</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-3, 5-19 have been examined.
2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/12/2006 has been entered.

The New Grounds of Rejection

3. Applicant's amendment and argument with respect to claims 1-3, 5-19, filed on 1/12/2006 have been fully considered but they are deemed to be moot in views of the new grounds of rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3, 5, 7, 8, 10-15, 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lemilainen et al., US Patent Number 6,681,259 hereinafter

Lemilainen, in views of Knauerhase, US Patent Number 6,215,774, hereinafter Knauerhase.

6. Referring to claim 1, Lemilainen has taught a mobile communication device (item A, figure 1) for communicating data through a predetermined network line (see figure 6), comprising:
 - a. a plurality of radio transmitting/receiving devices which are different at least in data communication speed from one another (figure 7, item D1, D2, D3);
 - b. selecting means (Col 9 lines 59-62) for selecting one of said plurality of radio transmitting/receiving devices in accordance with a data type of data signal to be transmitted or received (Col 2 line 66 – Col 3 line 3, lines 19-25, 38-42, Col 13 line 66 – Col 14 line 2); and
 - c. control means for controlling data communication by the one radio transmitting/receiving device selected by said selecting means (Col 3 lines 30-38, Col 5 lines 15-18, Col 10 lines 6-11).
 - d. setting means for setting an access point for each of said plurality of radio transmitting/receiving devices in accordance with a current position of a mobile unit (Col 9 lines 18-20, WLAN contains one or more cell, and each cell contains an access point);
 - e. wherein said selecting means selects a radio transmitting/ receiving device having a better data communication quality from said plurality of radio transmitting/ receiving devices as said one radio transmitting/ receiving device (Col 3 lines 30-33, and Col 10 lines 31-50).

Lemilainen does not explicitly teach selecting the higher speed when said data signal is a periodically transmitted data signal.

Knauerhase teaches selecting a higher speed for video data transmission (Col 8 lines 30-33, selecting a communications link having the fastest effective link speed, Col 4 lines 17-20 transmission of real-time data such as video is viewed as periodically transmitted data signal.)

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to incorporate the method of selecting the higher speed of Knauerhase with Lemilainen because both of Knauerhase and Lemilainen teaches invention of selecting the best quality of connection in a network.

A person with ordinary skill in the art would have been motivated to make the modification to Lemilainen because it would allow Lemilainen's system to determine effective link speed and provides the most appropriate services for communication between network devices as taught by Knauerhase (Col 1 lines 53-66.)

7. Referring to claim 2, Lemilainen as modified has taught an invention as described in claim 1, and has further taught wherein said selecting means selects a radio transmitting/receiving device having a better data communication quality from said plurality of radio transmitting/ receiving devices as said one radio transmitting/ receiving device (Col 3 lines 30-33, and Col 10 lines 31-50).

Although Lemilainen has not explicitly taught selecting the higher speed when the data signal to be transmitted or received has a relatively large data size. However, it is obvious to a person with ordinary skill in the art the time the invention was made to

understand the best possible quality connection as taught by Lemilainen (Col 3 lines 30-33) could be the fastest speed available for transferring a large size file in order to provide the best possible quality connection. Because having the large file being transferred with a higher speed is providing a better quality of connection than having the large file transferred in a lower speed.

Therefore, a person with ordinary skill in the art would have been motivated to make the modification to Lemilainen to provide the best possible quality connection as the higher speed when transferring a relatively large size file.

8. Referring to claim 3, Lemilainen as modified has taught an invention as described in claim 1, and has further taught wherein said selecting means selects a radio transmitting/receiving device which is relatively available for communication at all times from said plurality of radio transmitting/ receiving devices as said one radio transmitting/ receiving device when the data signal to be transmitted or received indicates emergency information which should be urgently communicated (Col 3 lines 33-38).
9. Referring to claim 5, Lemilainen as modified has further taught wherein said selecting means selects a radio transmitting/ receiving device which is relatively available for communication at all times from said plurality of radio transmitting/ receiving devices instead of said radio transmitting/receiving device having a higher data communication speed, as said one radio transmitting/receiving device, when said periodically transmitted data signal cannot be transmitted for a predetermined time period (Col 3 lines 30-42).
10. Referring to claim 7, Lemilainen as modified has taught an invention as described in claim 1, and has further taught wherein in a case that data transmission or reception is

requested in accordance with a manipulation (Col 3 lines 9-24, Col 12 lines 57-64, changing location in order to change type of connection is viewed as manipulation.), said selecting means selects a radio transmitting/ receiving device having a better data communication quality as said one radio transmitting/ receiving device when the radio transmitting/receiving device having a better quality of connection is available for communication within said plurality of radio transmitting/receiving devices (Col 10 lines 31-46, Col 3 lines 30-33), and said selecting means selects a radio transmitting/receiving device which is relatively available for communication at all times from said plurality of radio transmitting/receiving devices as said one radio transmitting/receiving device when said radio transmitting/receiving device originally having a better quality of connection is not available for the communication (Col 3 lines 30-38).

Although Lemilainen has not explicitly taught selecting the higher speed. Lemilainen does not explicitly teach selecting the higher speed when said data signal is a periodically transmitted data signal.

Knauerhase teaches selecting a higher speed for video data transmission (Col 8 lines 30-33, selecting a communications link having the fastest effective link speed, Col 4 lines 17-20 transmission of real-time data such as video is viewed as periodically transmitted data signal.)

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to incorporate the method of selecting the higher speed of Knauerhase with Lemilainen because both of Knauerhase and Lemilainen teaches invention of selecting the best quality of connection in a network.

A person with ordinary skill in the art would have been motivated to make the modification to Lemilainen because it would allow Lemilainen's system to determine effective link speed and provides the most appropriate services for communication between network devices as taught by Knauerhase (Col 1 lines 53-66.)

11. Referring to claim 8, Lemilainen as modified has further taught wherein said predetermined network line is the Internet (Figure 7 and Col 6 lines 42-49.)
12. Referring to claim 10, Lemilainen as modified has further taught wherein said radio transmitting/receiving device which is relatively available for communication at all times (Col 3 lines 33-37) within said plurality of radio transmitting/receiving devices is a mobile telephone (Col 5 lines 5-12).
13. Referring to claim 11, Lemilainen as modified has taught a mobile communicating method for communicating data through a predetermined network line (see figure 6), comprising the steps of:
 - a. selecting one of a plurality of radio transmitting/receiving devices which are different at least in data communication speed from one another in accordance with a data type of data signal to be transmitted or received (Col 2 line 66 – Col 3 lines 19-25, 38-42, Col 9 lines 59-62); and
 - b. controlling a data communication by the selected one radio transmitting/receiving device (Col 3 lines 30-38, Col 5 lines 15-18, Col 10 lines 6-11).

Lemilainen does not explicitly teach selecting the higher speed when said data signal is a periodically transmitted data signal.

Knauerhase teaches selecting a higher speed for video data transmission (Col 8 lines 30-33, selecting a communications link having the fastest effective link speed, Col 4 lines 17-20 transmission of real-time data such as video is viewed as periodically transmitted data signal.)

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to incorporate the method of selecting the higher speed of Knauerhase with Lemilaninen because both of Knauerhase and Lemilaninen teaches invention of selecting the best quality of connection in a network.

A person with ordinary skill in the art would have been motivated to make the modification to Lemilaninen because it would allow Lemilaninen's system to determine effective link speed and provides the most appropriate services for communication between network devices as taught by Knauerhase (Col 1 lines 53-66.)

14. Referring to claims 13 and 17, claims 13 and 17 encompasses the same scope of the invention as that of the claims 2 and 10. Therefore, the claims 13 and 17 are rejected for the same reason as the claims 2 and 10.
15. Referring to Claims 12, 14, 15 and 18, Claims 12, 14, 15 and 18 encompasses the same scope of the invention as that of the Claims 1, 3, 8. Therefore, the Claims 12, 14, 15 and 18 are rejected for the same reason as the Claims 1, 3, and 8.
16. Claims 6, 9, 16 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lemilainen in views of Knauerhase, and in further views of Willins et al., US Publication Number 2003/0021250, hereinafter Willins.

17. Referring to claim 6, Lemilainen as modified has taught an invention as described in claim 1, and has further taught wherein said setting means sets a travel route from a current position to a destination of said mobile unit, and sets an access point for each of said plurality of radio transmitting /receiving devices (Col 9 lines 16-22.)

Lemilainen as modified has not explicitly taught wherein the access point is located at the shortest distance from the current position of said mobile unit.

However, Willins has taught according to the 802.11 protocol, access point is located at the shortest distance from the current position of said mobile unit (page 1 [0011]).

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have Lemilainen's access point to be located at the shortest distance from the current position of said mobile unit as taught by Willins (page 1 [001]) because both of Lemilainen and Willins have taught inventions relating to wireless data communications and both have mobile device operating under IEEE 802.11 protocol (Lemilainen, Col 4 lines 25.)

A person with ordinary skill in the art would have been motivated to make the modification to Lemilainen because Lemilainen's mobile is also using IEEE 802.11 protocol which the access point is located at the shortest distance from the current position of said mobile unit as taught by Willins (page 1 [0011]).

18. Referring to claim 9, Lemilainen as modified has taught an invention as described in claim 2, however, Lemilainen has not taught wherein said radio transmitting/receiving

device is a Bluetooth transmitter/receiver. However, Willins has explicitly taught the radio transmitting/receiving device can be a Bluetooth (Page 1 [0004].)

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have Lemilainen's mobile device to be implemented using the Bluetooth protocol because both of Lemilainen and Willins have said radio transmitting/receiving device as the wireless device and Bluetooth is one of the wireless protocol.

A person with ordinary skill in the art would have been motivated to make the modification to Lemilainen because Bluetooth is a well known for short-range radio links between mobile computers, mobile phones, digital cameras, and other portable devices.

19. Referring to claims 16 and 19, claims 16 and 19 encompass the same scope of the invention as that of the claim 9. Therefore, the claims 16 and 19 are rejected for the same reason as the claim 9.

Conclusion

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Liang-che Alex Wang whose telephone number is (571)272-3992. The examiner can normally be reached on Monday thru Friday, 8:30 am to 5:00 pm.
21. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571)272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2155

22. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Liang-che Alex Wang *LW*
March 9, 2006


SALEH NAJJAR
SUPERVISORY PATENT EXAMINER